



Coursera - Creating an AWS EC2 Autoscaling Group using Load Balancer

Generated on December 20, 2023

Summary

Notes	Screenshots	Bookmarks
6	18	0

Task 6: Creating Our first EC2 Auto-Scaling Group

0:03

EC2 Management Console

us-east-2.console.aws.amazon.com/ec2/v2/home?region=us-east-2#LoadBalancers:sort=loadBalancerName

Services

Resource Groups

My Account

Ohio

Support

Capacity Reservations

Images

AMIs

Elastic Block Store

Volumes

Snapshots

Lifecycle Manager

Network & Security

Security Groups New

Elastic IPs New

Placement Groups New

Key Pairs New

Network Interfaces

Load Balancing

Load Balancers

Target Groups New

Auto Scaling

Launch Configurations

Auto Scaling Groups

Create Load Balancer

Actions

Filter by tags and attributes or search by keyword

Name	DNS name	State	VPC ID	Availability Zones
autoscaling-lb	autoscaling-lb-255201861.us...	provisioning	vpc-ca5df1a1	us-east-2a, us-east-2c, ...

Load balancer: autoscaling-lb

Description

Listeners

Monitoring

Integrated services

Tags

Basic Configuration

Name

autoscaling-lb

ARN

arn:aws:elasticloadbalancing:us-east-2:214856675350:loadbalancer/app/autoscaling-lb/777502d35af07392

DNS name

autoscaling-lb-255201861.us-east-2.elb.amazonaws.com

Feedback

English (US)

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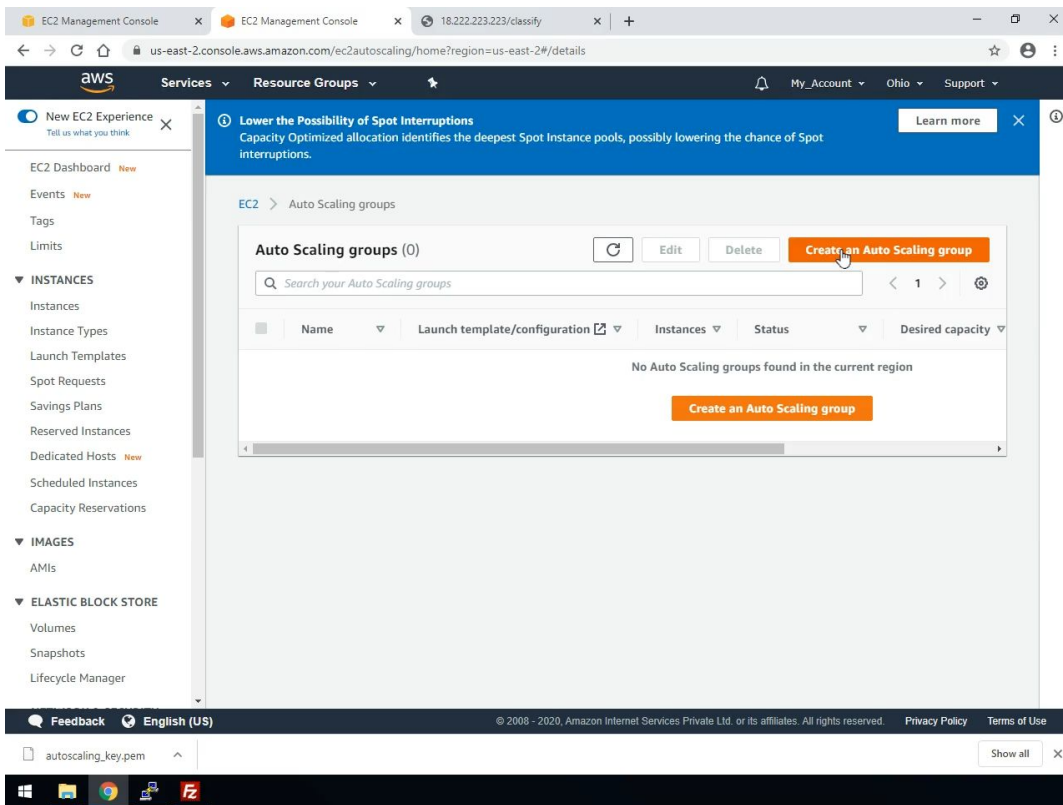
Privacy Policy

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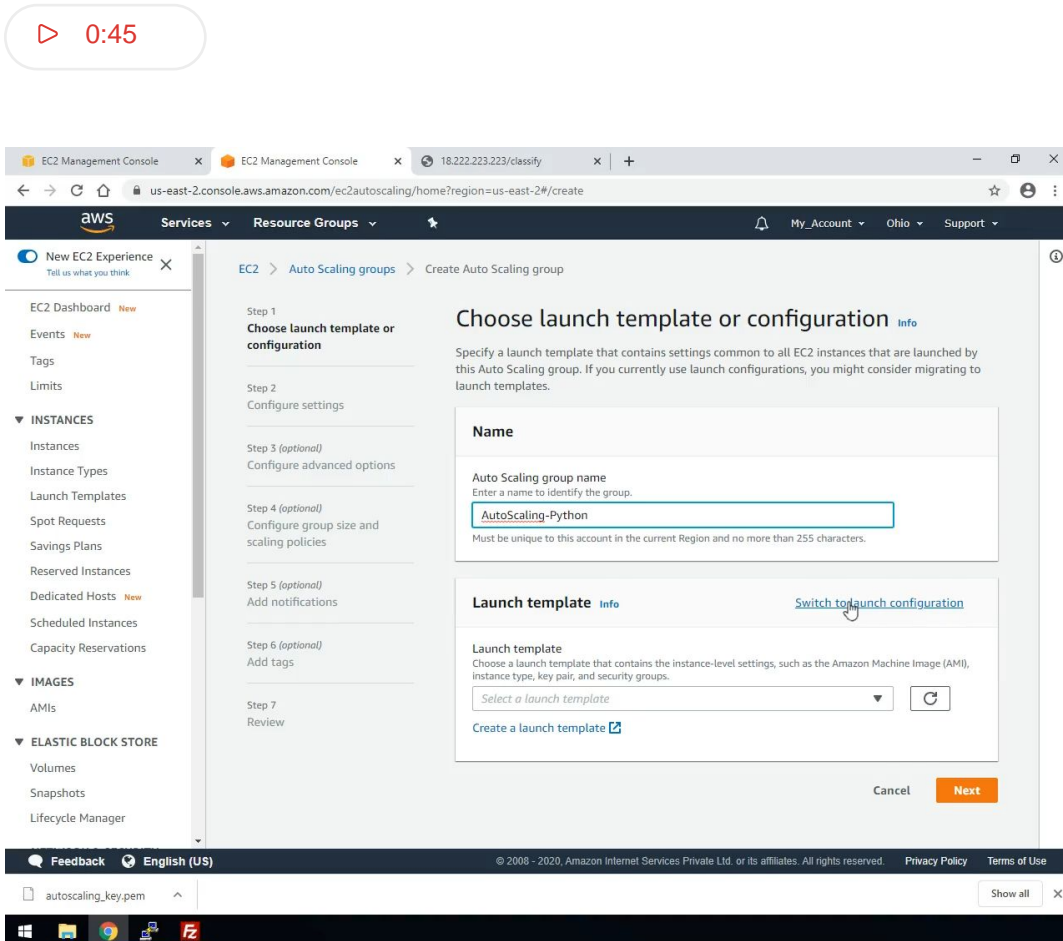
autoscaling_key.pem

Show all

0:13



click on switch to launch configuration



▶ 0:45

EC2 Management Console

us-east-2.console.aws.amazon.com/ec2autoscaling/home?region=us-east-2#/create

Services Resource Groups

EC2 > Auto Scaling groups > Create Auto Scaling group

Step 1: Choose launch template or configuration

Step 2: Configure settings

Step 3 (optional): Configure advanced options

Step 4 (optional): Configure group size and scaling policies

Step 5 (optional): Add notifications

Step 6 (optional): Add tags

Step 7: Review

Choose launch template or configuration

Specify a launch template that contains settings common to all EC2 instances that are launched by this Auto Scaling group. If you currently use launch configurations, you might consider migrating to launch templates.

Name

Auto Scaling group name
Enter a name to identify the group.
AutoScaling-Python
Must be unique to this account in the current Region and no more than 255 characters.

Launch configuration [Info](#) [Switch to launch template](#)

Launch configuration
Choose a launch configuration that contains the instance-level settings, such as the Amazon Machine Image (AMI), instance type, key pair, and security groups.

Select a launch configuration

Search launch configurations

autoscaling-ic

Cancel Next

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autoscaling_key.pem Show all

▶ 0:52

EC2 Management Console

us-east-2.console.aws.amazon.com/ec2autoscaling/home?region=us-east-2#/create

Services Resource Groups

EC2 > Auto Scaling groups > Create Auto Scaling group

Step 1: Choose launch template or configuration

Step 2: Configure settings

Step 3 (optional): Configure advanced options

Step 4 (optional): Configure group size and scaling policies

Step 5 (optional): Add notifications

Step 6 (optional): Add tags

Step 7: Review

configuration

Specify a launch template that contains settings common to all EC2 instances that are launched by this Auto Scaling group. If you currently use launch configurations, you might consider migrating to launch templates.

Name

Auto Scaling group name
Enter a name to identify the group.
AutoScaling-Python
Must be unique to this account in the current Region and no more than 255 characters.

Launch configuration [Info](#) [Switch to launch template](#)

Launch configuration
Choose a launch configuration that contains the instance-level settings, such as the Amazon Machine Image (AMI), instance type, key pair, and security groups.

autoscaling-ic

Create a launch configuration ☒

Launch configuration	AMI ID	Date created
autoscaling-ic	ami-0e8a219e99dea358f	Fri Sep 04 2020 20:07:13 GMT+0000 (Greenwich Mean Time)
Security groups	Instance type	Key pair name
sg-07eca13125f569846	t2.micro	-

Cancel Next

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autoscaling_key.pem Show all

▶ 1:00

The screenshot shows the AWS Management Console interface for creating an Auto Scaling group. The left sidebar contains navigation links for EC2 Dashboard, Events, Tags, Limits, INSTANCES, IMAGES, and ELASTIC BLOCK STORE. The main content area is titled 'Configure settings' and includes a progress bar with steps: Step 1 (Choose launch template or configuration), Step 2 (Configure settings), Step 3 (optional), Step 4 (optional), Step 5 (optional), Step 6 (optional), and Step 7 (Review). The 'Network' section is expanded, showing the VPC configuration (vpc-ca5df1a1) and Subnets (us-east-2a, us-east-2b, us-east-2c). The 'Next' button is highlighted.

▶ 1:16

The screenshot shows the AWS Management Console interface for creating an Auto Scaling group, specifically the 'Configure advanced options' step. The left sidebar is the same as the previous screenshot. The main content area is titled 'Configure advanced options' and includes a progress bar with steps: Step 1 (Choose launch template or configuration), Step 2 (Configure settings), Step 3 (optional), Step 4 (optional), Step 5 (optional), Step 6 (optional), and Step 7 (Review). The 'Load balancing - optional' section is expanded, showing the 'Enable load balancing' checkbox (checked) and the 'Application Load Balancer or Network Load Balancer' selection. The 'Health checks - optional' section is also visible, showing the 'Health check type' (EC2) and 'Health check grace period'.

▶ 1:31

The screenshot shows the AWS Management Console interface for the 'us-east-2' region. The left sidebar contains navigation links for 'New EC2 Experience', 'EC2 Dashboard', 'Events', 'Tags', 'Limits', 'INSTANCES', 'IMAGES', and 'ELASTIC BLOCK STORE'. The main content area displays the 'Create Auto Scaling group' wizard, specifically Step 7: Review. The wizard steps are: Step 1 (Choose launch template or configuration), Step 2 (Configure settings), Step 3 (Configure advanced options), Step 4 (Configure group size and scaling policies), Step 5 (Add notifications), Step 6 (Add tags), and Step 7 (Review). The 'Review' step shows a summary of the configuration: 'Choose a target group for your load balancer' (autoscaling-tg), 'Health checks - optional' (EC2 and ELB health checks, 300 seconds grace period), and 'Additional settings - optional' (Monitoring enabled). At the bottom, there are buttons for 'Cancel', 'Previous', 'Skip to review', and 'Launch'.

▶ 2:15

The screenshot shows the AWS Management Console interface for the 'us-east-2' region. The left sidebar is the same as the previous screenshot. The main content area displays the 'Create Auto Scaling group' wizard, specifically Step 4: Configure group size and scaling policies. The wizard steps are: Step 1 (Choose launch template or configuration), Step 2 (Configure settings), Step 3 (Configure advanced options), Step 4 (Configure group size and scaling policies), Step 5 (Add notifications), Step 6 (Add tags), and Step 7 (Review). The 'Configure group size and scaling policies' step shows a summary of the configuration: 'Group size - optional' (Desired capacity: 1, Minimum capacity: 1, Maximum capacity: 3), and 'Scaling policies - optional' (Choose whether to use a scaling policy to dynamically resize your Auto Scaling group to meet changes in demand). At the bottom, there are buttons for 'Cancel', 'Previous', 'Skip to review', and 'Launch'.

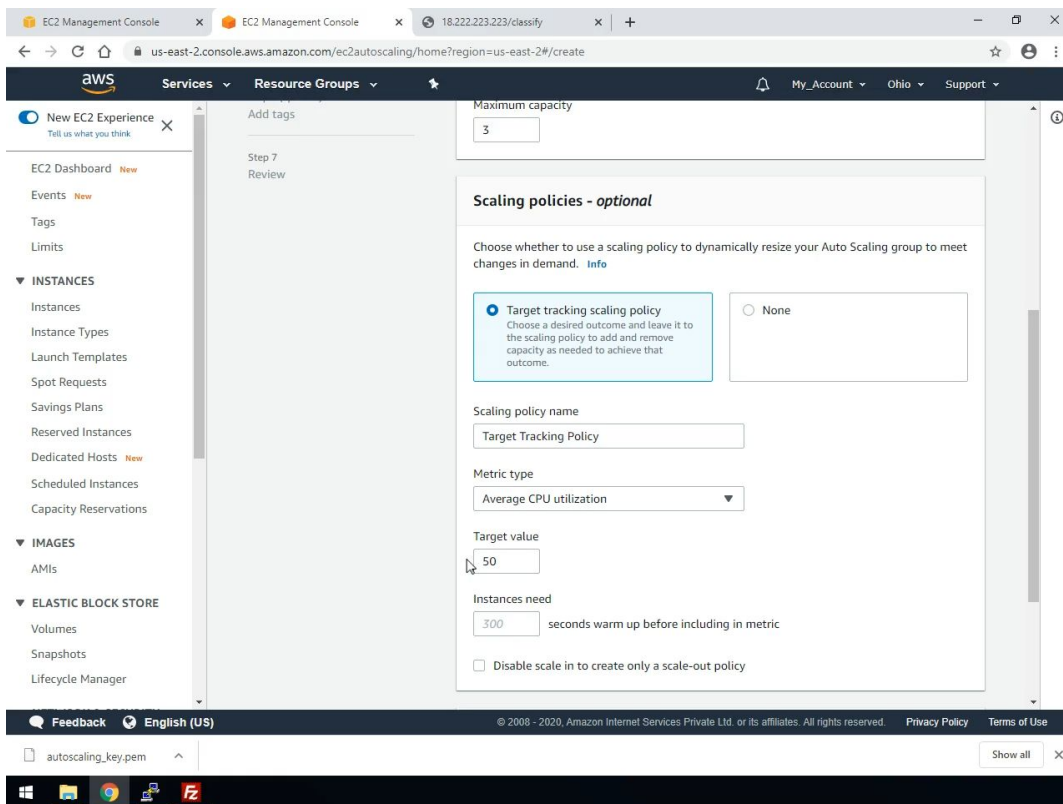
▶ 2:50

we will go to the maximum capacity of 3 instance

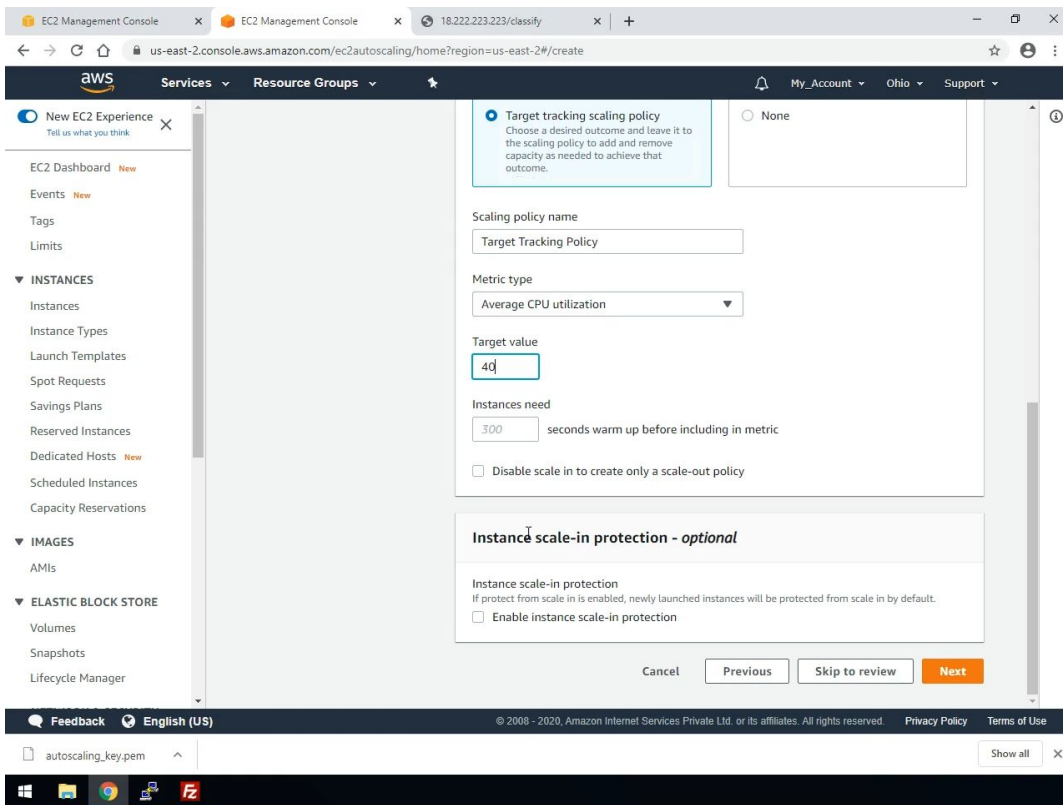
▶ 2:52

if the Avg.CPU utilization goes above 50% it will provisioned another EC2 instance

▶ 3:41



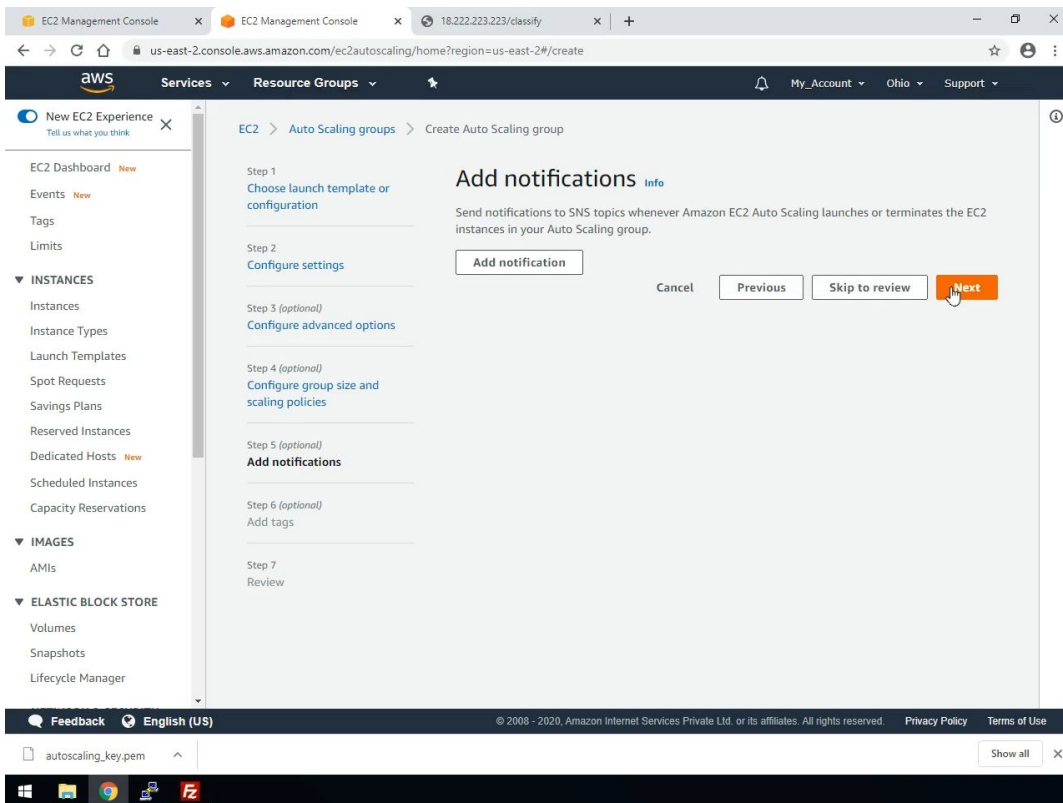
▶ 3:52



▶ 4:15

click next

▶ 4:25



▶ 4:36

The screenshot shows the AWS Management Console interface for creating an Auto Scaling group. The left sidebar contains navigation links for EC2 Dashboard, INSTANCES, IMAGES, and ELASTIC BLOCK STORE. The main content area is titled 'Review' and shows the progress of the creation steps. Step 1, 'Choose launch template or configuration', is the active step, showing 'Group details' with the name 'AutoScaling-Python' and 'Launch configuration' as 'autoscaling-1c'. Step 2, 'Configure settings', is also visible, showing 'Network' settings with VPC 'vpc-ca5df1a1', Availability Zone 'us-east-2a', and Subnet 'subnet-884793e3'. The bottom of the console shows a file explorer with 'autoscaling_key.pem' and a taskbar with various application icons.

▶ 4:50

The screenshot shows the AWS Management Console interface for creating an Auto Scaling group, continuing from the previous step. The main content area shows Step 5, 'Add notifications', with a 'Notifications' section indicating 'No notifications'. Below this is Step 6, 'Add tags', with a 'Tags (0)' section indicating 'No tags'. The bottom of the console shows a file explorer with 'autoscaling_key.pem' and a taskbar with various application icons. The 'Create Auto Scaling group' button is visible at the bottom right of the main content area.

5:21

EC2 Management Console

us-east-2.console.aws.amazon.com/ec2autoscaling/home?region=us-east-2#/details

Services Resource Groups

My Account Ohio Support

New EC2 Experience

EC2 Dashboard

Events

Tags

Limits

INSTANCES

Instances

Instance Types

Launch Templates

Spot Requests

Savings Plans

Reserved Instances

Dedicated Hosts

Scheduled Instances

Capacity Reservations

IMAGES

AMIs

ELASTIC BLOCK STORE

Volumes

Snapshots

Lifecycle Manager

Save Up to 90% on Compute

Optimize compute costs by creating your Auto Scaling group with a launch template to combine EC2 On-Demand, Spot and RIs.

Learn more

AutoScaling-Python, 1 Scaling policy created successfully. Group metrics collection is enabled.

EC2 > Auto Scaling groups

Auto Scaling groups (1)

Search your Auto Scaling groups

	Name	Launch template/configuration	Instances	Status	Desired capacity
<input type="checkbox"/>	AutoScaling-Pythc	autoscaling-lc	0	Updating capacity	1

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autoscaling_key.pem

Show all

5:33

EC2 Management Console

us-east-2.console.aws.amazon.com/ec2/v2/home?region=us-east-2#LoadBalancers:sort=loadBalancerName

Services Resource Groups

My Account Ohio Support

New EC2 Experience

EC2 Dashboard

Events

Tags

Limits

Instances

Instances

Instance Types

Launch Templates

Spot Requests

Savings Plans

Reserved Instances

Dedicated Hosts

Capacity Reservations

Images

AMIs

Elastic Block Store

Volumes

Snapshots

Lifecycle Manager

Network & Security

Create Load Balancer

Actions

Filter by tags and attributes or search by keyword

Name	DNS name	State	VPC ID	Availability Zones
autoscaling-lb	autoscaling-lb-255201861.us...	active	vpc-ca5df1a1	us-east-2a, us-east-2c, ...

Load balancer: autoscaling-lb

Description Listeners Monitoring Integrated services Tags

Basic Configuration

Name	autoscaling-lb
ARN	arn:aws:elasticloadbalancing:us-east-2:214856675350:loadbalancer/app/autoscaling-lb/777502d35af07392
DNS name	autoscaling-lb-255201861.us-east-2.elb.amazonaws.com

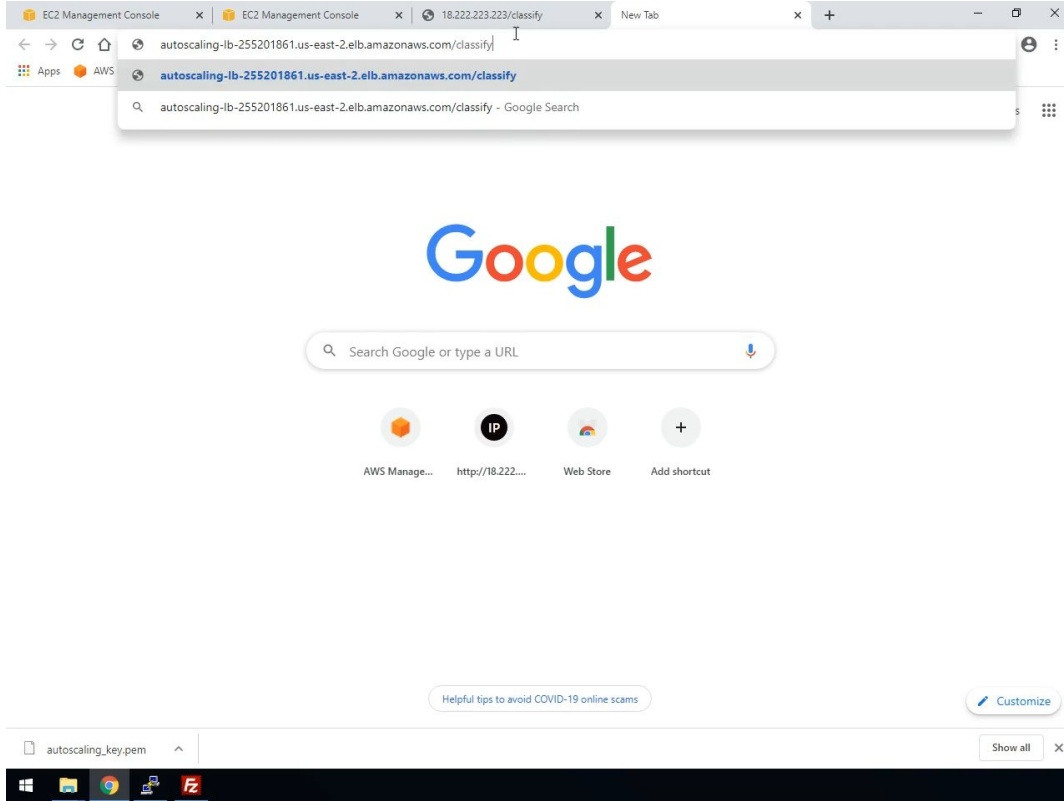
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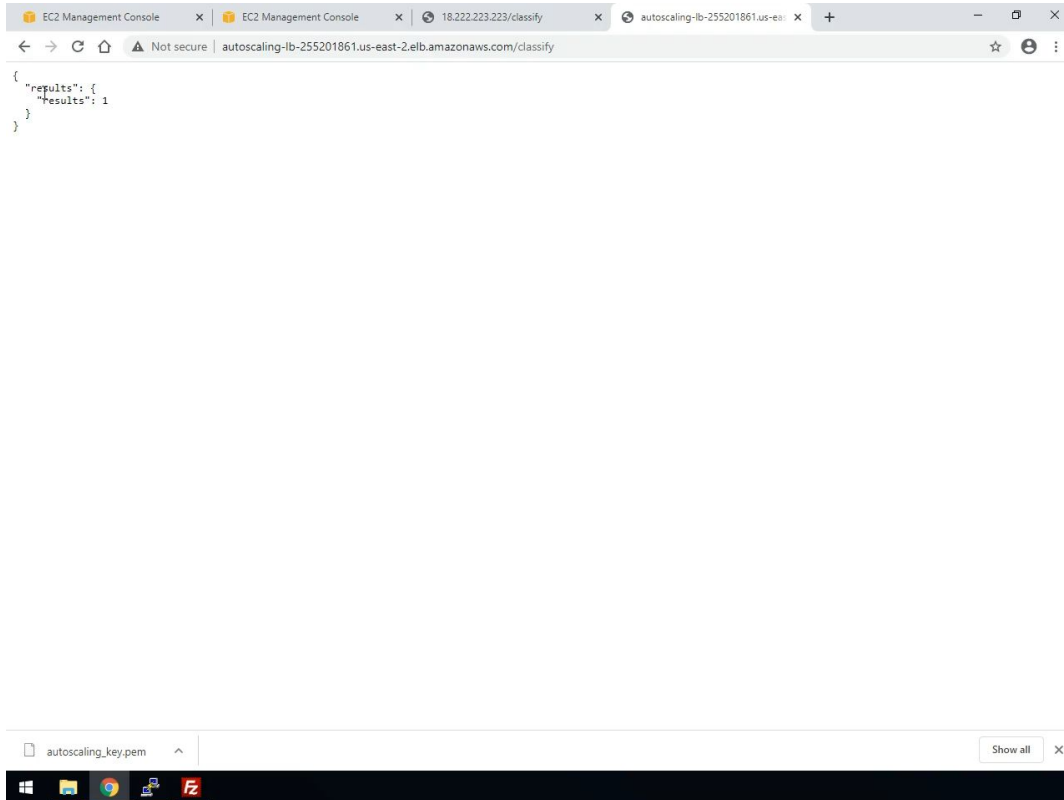
autoscaling_key.pem

Show all

6:17



6:28



▶ 6:32

our auto scaling group has been mapped successfully

▶ 6:36